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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/687,172	10/16/2000	Lawrence J. Andrews	WAB 00266	1113

7590

11/21/2002

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EXAMINER

PICKARD, ALISON K

ART UNIT

PAPER NUMBER

3676

DATE MAILED: 11/21/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/687,172

Applicant(s)

ANDREWS, LAWRENCE J. 

Examiner

Alison K. Pickard

Art Unit

3676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 10 and 12-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 10 and 12-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 May 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the check valve and reset spool (claim 16) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6, 10, and 12-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Forster.

Forster discloses a device for securing a sealing member in a predetermined position comprising a positioning element 40 and a retaining element 42. The retaining element 42 is integrally formed on a first surface of the positioning element (e.g. see Fig. 6). The retaining element has a bevel with a first end and second end. The retaining and positioning elements have equal inside diameters. The outside diameter (or the first end of the bevel) of the retaining element is smaller than the positioning element's and a radius is disposed tangent to the first end

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of the bevel and first surface. Forster discloses two positioning elements and two retaining elements (see Figs. 6, 8, and 10). A spacer means 44 or 49 is provided between the two positioning and retaining elements. The spacer has a plurality (four) posts. The spacer, positioning elements, and retaining elements can be formed integrally as a single piece 51 (see Fig. 8). This unit would also comprising four posts separated by fluid ports 52 (similar to posts 44 and ports 47 in Fig. 6).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art in view of Forster.

Claims 16-21 are considered Jepson claims because of the phrase "the improvement comprising." Therefore, everything before that phrase is considered admitted prior art. Thus, Applicant has disclosed a known combination of a plurality of spool valve shells with a pressure release valve having a high pressure port, low pressure port, spool valve, check valve, and a reset spool. Applicant has not disclosed spool valve shells comprising two positioning element, two retaining elements, a spacer means, and a sealing member. Forster teaches spool valve shells for use with valves, spool and ports. Forster teaches a sealing member (o-ring) 30 disposed between two opposing positioning elements 40 of two adjacent valve shells 23. Each shell has two

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positioning elements, two retaining elements 42 and a spacer means 44 (or 49). The retaining and positioning elements have equal inside diameters. The outside diameter of the retaining element is smaller than the positioning element's. Forster teaches that the shells effectively space and fix each sealing element while eliminating wear between the valve member and shell. Forster teaches that the retaining elements on the positioning elements serve to limit lateral movement of the sealing member and to maintain a relatively fixed friction between the spool and seal while preventing the seal from lifting off the spool or distorting. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the shells disclosed by the applicant with the shells taught by Forster to provide reduced wear, limited lateral movement of the seals, and effective sealing engagement of the seals even at high pressure.

6. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art in view of Forster as applied to claim 20 above, and further in view of Applicant's admitted prior art (spec. page 1, lines 19-21).

Forster discloses a resilient seal, but does not specify the material. Applicant admits that using nitrile material for a seal provides a leak-proof seal. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to make the seal of nitrile to provide a leak-proof seal.

Response to Arguments

7. Applicant's arguments filed 9-3-02 have been fully considered but they are not persuasive.

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As stated above, Forster discloses the combination of limitations required by the claims. Forster discloses a single-piece construction. Forster discloses a retaining element on a first surface of a positioning element having a bevel and a radius. The radius is located at the radially outer end of the bevel as it is in applicant's Fig.3). Applicant has not provided any other structure, definitions, description, or limitations to distinguish the claimed "radius" from that shown in Forster. The "spool type pressure release valve" of claim 16 is admitted prior art because of the Jepson form. Regardless, Forster discloses a spool shell in combination with valves, ports, and spool.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

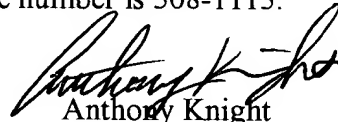
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alison K. Pickard whose telephone number is 703-305-0882.

The examiner can normally be reached on M-F (9-6:30), with alternate Friday's off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 703-308-3179. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-8729327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-1113.



Anthony Knight
SPE
Art Unit 3676

AP
November 18, 2002